

**AMENDMENTS TO THE CLAIMS:**

Claims 1-27 (Canceled)

28. (Currently amended) A transgenic mouse whose genome comprises a disruption in an endogenous nucleotide sequence comprising SEQ ID NO:1-BMP gene, wherein where the disruption is homozygous, the transgenic mouse lacks production of functional protein encoded by the nucleotide sequence-BMP, and exhibits at least one of the following phenotypes: a kinky tail, low body weight or short body length, relative to a wild-type mouse.
29. (Currently amended) A cell ~~or tissue~~ obtained from the transgenic mouse of claim 28, wherein the cell lacks production of functional protein encoded by the nucleotide sequence comprising SEQ ID NO:1-BMP.
30. (Currently amended) A transgenic mouse comprising a heterozygous disruption in an endogenous nucleotide sequence comprising SEQ ID NO:1-BMP gene, wherein the disruption in a homozygous state results in lack of ~~inhibits~~ production of functional protein encoded by the nucleotide sequence-BMP resulting in a transgenic mouse exhibiting at least one of the following phenotypes: a kinky tail, low body weight or short body length, relative to a wild-type mouse.
31. (Currently amended) A method of producing a transgenic mouse comprising a disruption in an endogenous nucleotide sequence comprising SEQ ID NO:1-BMP gene, the method comprising:
- introducing a targeting construct capable of disrupting the nucleotide sequence comprising SEQ ID NO:1-an endogenous murine BMP gene into a murine embryonic stem cell;
  - introducing the murine embryonic stem cell into a blastocyst;
  - implanting the resulting blastocyst into a pseudopregnant mouse, wherein said-the pseudopregnant mouse gives birth to a chimeric mouse; and
  - breeding the chimeric mouse to produce the transgenic mouse;
- wherein where the disruption is homozygous, the transgenic mouse lacks production of functional protein encoded by the nucleotide sequence comprising SEQ ID NO:1-BMP

and exhibits at least one of the following phenotypes: a kinky tail, low body weight or short body length, relative to a wild-type mouse.

Claims 32-36 (Canceled)